

## Patent Abstracts of Japan

PUBLICATION NUMBER : 05220849  
PUBLICATION DATE : 31-08-93

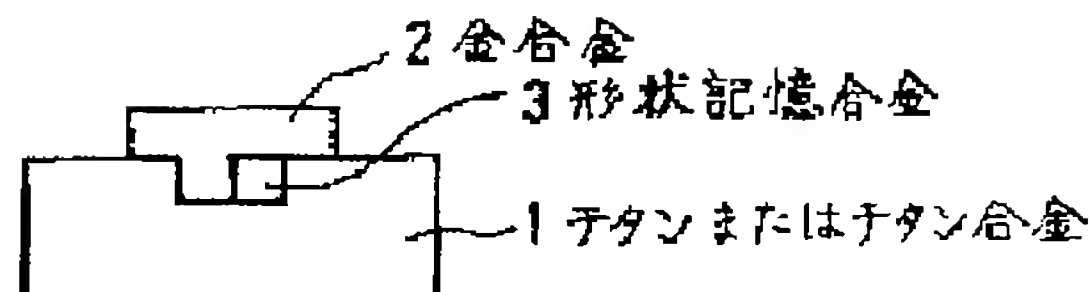
APPLICATION DATE : 17-02-92  
APPLICATION NUMBER : 04029754

APPLICANT : SEIKO INSTR INC;

INVENTOR : KOROISHI KEITAROU;

INT.CL. : B29C 65/66 G04B 45/00 // C22C 19/03  
B29K105:20 B29L 31:48

TITLE : JOINT BODY AND METHOD FOR  
JOINTING



ABSTRACT : PURPOSE: To obtain a joint body with high strength and good corrosion resistance without softening easily the jointed interface between a titanium alloy and a gold alloy and spoiling beautiful appearance by inserting and jointing an object to be jointed and a shape memory alloy in a recessed part or a perforated part provided in a joint matrix.

CONSTITUTION: A combination of titanium or a titanium alloy 1 and a gold alloy 2 is used for jointing of a joint matrix and an object to be jointed and the gold alloy 2 which is the object to be jointed and a shape memory alloy 3 are inserted into a recessed part or a perforated part provided in the titanium or the titanium alloy 1 which is the joint matrix. Then, diffusion jointing is performed by heating under a relation of  $T_m - 50 \geq T \geq T_m - 400$  (Unit: °C) (wherein T is heating temp. and  $T_m$  is the m.p. of the gold alloy). As the titanium and the titanium alloy are jointed under a solid condition like this, the interface for jointing is not changed in shape and a jointed body with excellent corrosion resistance and high strength can be obtd.

COPYRIGHT: (C)1993,JPO&Japio